

CLAIMS

1. Lithography method involving the pressing of a substrate, including a preparation step during which the substrate (1) is covered with a layer, a pressing step in which a mold comprising a pattern of recesses and protrusions is pressed so as to penetrate part of the thickness of the aforementioned layer, at least one attacking step in which the layer is attacked until parts of the surface of the substrate have been stripped, and an etching step whereby the substrate is etched using an etching pattern which is defined by the mold pattern, which method is characterized in that the preparation step comprises a sub-step consisting of the formation of a lower sub-layer (2A) of curable material, a step involving the curing of said sub-layer and a sub-step consisting of the formation of an outer sub-layer (2B) which is adjacent to the cured sub-layer, the pressing step including penetration of the above-mentioned protrusions of the mold into this external sub-layer until it comes into contact with this cured sub-layer.

2. Method according to claim 1, characterized in that this lower sub-layer is formed in contact with the surface of the substrate and in that, during the attacking step, the lower sub-layer is excavated through the recesses of the external sub-layer and, during the etching step, the substrate is attacked through the same recesses.

3. Method according to claim 1 or claim 2, characterized in that the lower sub-layer and the external sub-layer are made of the same material.

4. Method according to any one of claims 1 to 3, characterized in that the curing treatment includes heat treatment of the lower sub-layer at a temperature higher than its curing temperature and the pressing step is carried out at a pressing temperature higher than the glass transition temperature of the external sub-layer.

5. Method according to any one of claims 1 to 4, characterized in that the material is a polymer.

6. Method according to any one of claims 1 to 5, characterized in that the material is a resin that can be cross-linked.

7. Method according to claim 5 or claim 6, characterized in that the material is a negative resin or a positive resin.

8. Method according to any one of claims 1 to 7, characterized in that the lower sub-layer has a thickness from 0.01 micron to 1 micron.

9. Method according to any one of claims 1 to 8, characterized in that the thickness of the external sub-layer is less than the depth of the recesses of the pattern of the mold.